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Phase Three Days 21-30

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Days 21-30…The Beginning

- By now, most evidence should be thoroughly analyzed, but some evidence might still be at labs or contractors
- Should’ve ruled in/out most of the likely or unlikely scenarios
- Board focus should be concentrated on specifics
- Report and Briefing should by coming together
- Starting to draft Findings, Causes, and Recommendations

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Days 21-30
The Report: Part One

- Tabs A-S
- Should be Finished at this Point
- Factual Data -- Completely Releasable
- Must Contain Original Documents To Max Extent
- Given To AIB For Their Investigation
- Have Recorder Press MAJCOM / SE For Board Orders, Usually The Last Tab Finished

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Phase Three, Preparing Report

- **Part II (Tabs T-Z) Explains "Why" the Mishap Occurred…..**
  - **Tab T – Narrative, Findings, Causes, Recommendations**
  - **Tab U – Witness Statements, Testimony**
  - **Tab V - Statement of Persons Cited in Findings**
  - **Tab W – Technical and Engineering Evaluations**
  - **Tab Y – Life Sciences Report**
  - **Tab Z – SIB Proceedings**

…….The Privileged Parts

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Tab T Overview

- Most Time Consuming, Least Enjoyable Phase
- Tab T Is Heart and Soul of the SIB Process
  - Tab T is the “Meat” of the White Elephant
  - Findings/Recommendations “Meat” of Tab T
- Expect Between 15,000 to 20,000 Words in Length
  - 30 to 60 pages
- All Other Tabs Support Tab T
- Tab T Becomes the Final Message Report

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Tab T Overview

- **Executive Summary**
  - **Two or three page overview of all the following:**
- **Mishap Sequence (narrative)**
- **Investigation and Analysis (narrative)**
- **Findings (bullets)**
- **Recommendations (bullets)**
- **Other Findings and Recommendations of Significance (bullets)**
- **Authentication Page**

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Tab T, Investigation, Analysis, Findings, and Recommendations

- **Draws on All Portions of Investigation for Complete Picture of *What* Happened, and *Why***
- **Thorough Analysis of All Evidence**
- **Records Opinions of the SIB, and Should Support All Probable Scenarios, Theories and Conclusions**

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The Investigation/Analysis

"The Narrative"

- **Responsibility of All SIB Members, but I.O. Typically Drafts**
- **Explains "how" and "why" the mishap occurred……**
- **Format Up to SIB….**
  - **5 M's: Man, Machine, Media, Management, Mission**
  - **Factors: Ops, MX, Supervision, etc**
- **Clearly show the scope of the investigation….explain why some possibilities are eliminated, but others retained**

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Writing the Narrative

- **Objective is to Show….**
  - **Areas investigated**
  - **Factors considered and rejected, with rationale**
  - **Factors accepted with rationale**
- **More an “art” then a “science”**
- **Use Illustrations to clarify if required….**
  - **“A picture is worth a thousand words…”**

Writing the Narrative

- **"The nozzle separated at the aft spot welds on the augmentor duct……"**

WHAT?!?!?!

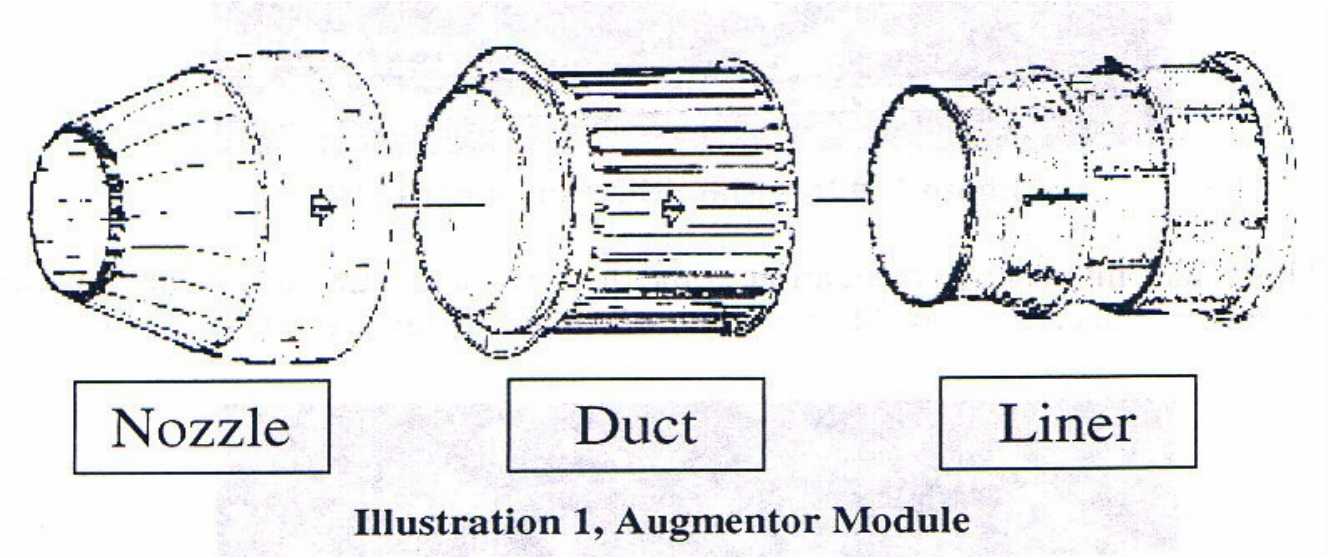

Illustration 1, Augmentor Module

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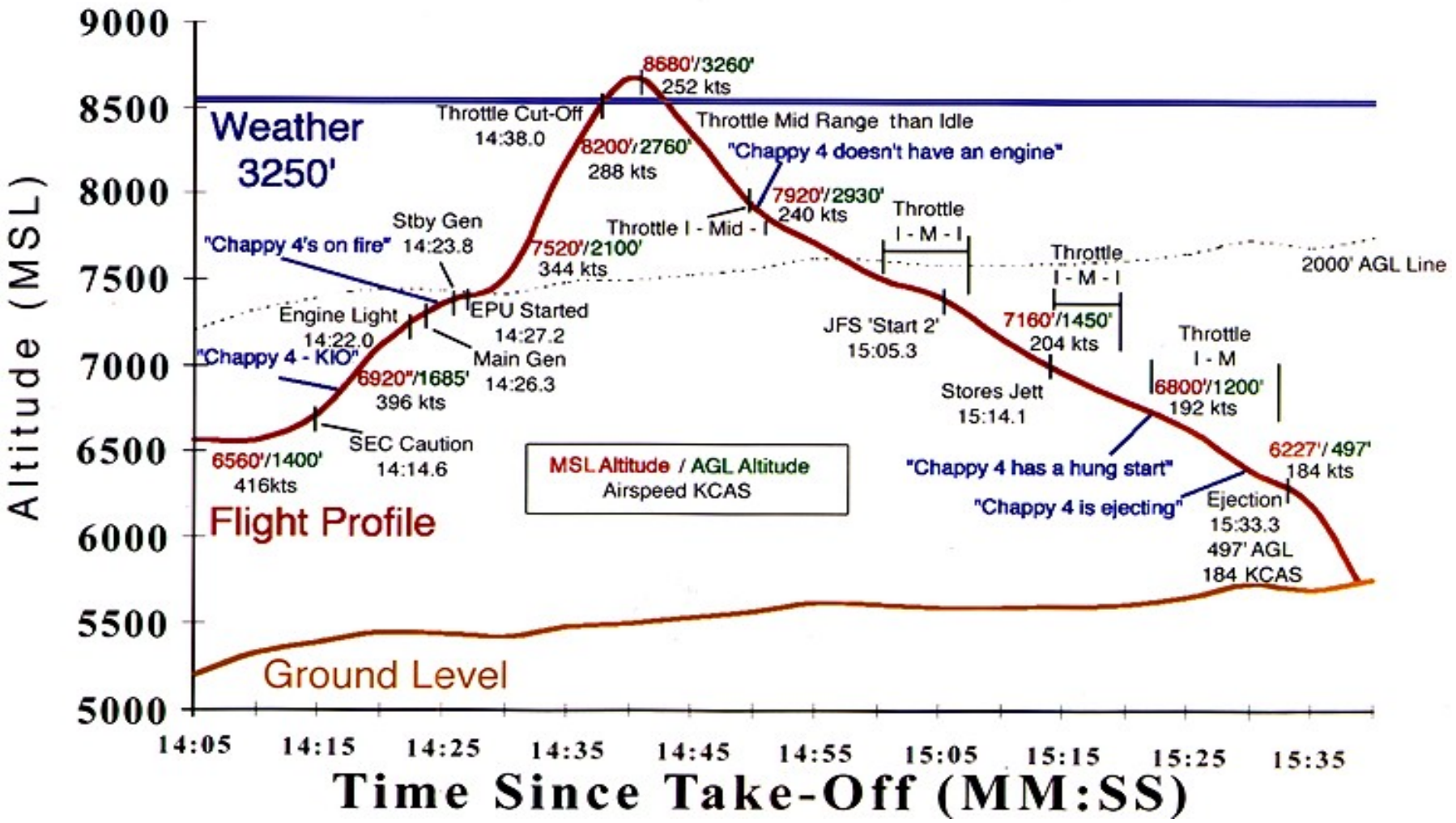
Writing the Narrative



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Drafting Tab T

I Executive Summary — AFSC Rep, LAST!

II Mishap Overview

- A. Mishap Sortie
- B. Mishap Response
- C. Wreckage Recovery

PM

III Operational Areas Investigated, Not Factors — AFSC Rep

Drafting Tab T

IV Operational Investigation, Analysis and Conclusions

A. Mishap Pilot Background, Qualifications, etc

B. Mishap Sortie

1. Briefing

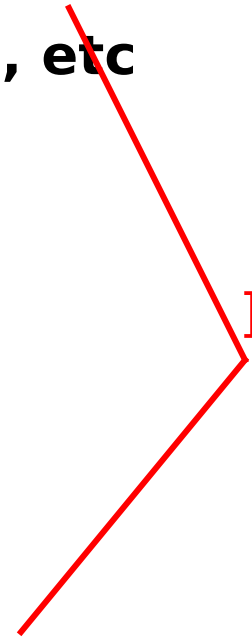
2. Preflight and Launch

3. Takeoff

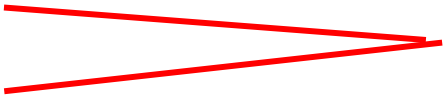
4. Mishap Analysis

5. Abort and Simulator Training

C. Supervision



IO and PM



BP

Drafting Tab T

V Maintenance Areas Investigated, Not Factors — AFSC Rep

VI Maintenance Investigation, Analysis and Conclusions

A. Aircraft Background/History

B. Aircraft Records

C. Recent Maintenance Performed

1. Brake Maintenance

— MM

VII Findings

VIII Recommendations

— ALL

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Preparing Report: Problem Areas

- Persuasive, Complete, Accurate Writing
  - You know what you mean
- Numerous Drafts to get to Final Product
  - Can't See Gaps in Logic/Info After a While
- Writing to a "Narrow" Audience
  - Write to the "village idiot"

Preparing Report: Problem Areas

MIP began his normal walk- around and noticed that the argon level was low and the crew chief obtained a new bottle. Exterior inspection continued normally. After engine start, the pilot noted that the right integrated drive generator (IDG) did not come on line immediately, and said that humidity was likely the cause. IDG began working normally during the remaining preflight tasks and all other items were uneventful through takeoff. During aircraft arming at end of runway (EOR), MF overheard Auger 1 passing a pilot report (PIREP) to the SOF concerning a low fogbank approaching from the southwest. MF took off at 1739L in trail formation.

argon Level of what?

who said?

after how Long?

(another flight of locally based A-10s enroute to the range)

approaching where? the airfield?

why late?

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Preparing Report: Problem Areas

- **Subjective Wording**
  - **“The SIB seriously considered…” vs “investigated”**
  - **“SIB felt that….” vs “SIB concluded…..”**
  - **“SIB believed….” vs “SIB determined….”**
- **Leave Out The “Gore”**
- **Often under Severe “Time Crunch” to Complete**
  - **Underestimate time to complete/# of Drafts required**

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Investigation/Analysis: Keep In Mind….

"There are no new types of air crashes -- only people with short memories. Every accident has its own forerunners….."

Stephen Barlay, March 1990, 'The Final Call: Why Airline Disasters Continue to Happen.'

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A Plug for the "Doc"…

Tab Y - Life Sciences

- Contains Narrative, HF consults, Tox Testing, Autopsies
- Doc's responsibility
- "Cut" into Tab T
- Part of Tab T "cut" into Tab Y
- Tone down "Doc Babble" for Tab T

Drafting Findings, Causes, & Recommendations

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Findings (1 of 7)

- Findings Represent the SIB's Conclusions After Analyzing and Deliberating on the Facts
- They Must Be Based on:
  - The Weight of Evidence
  - Professional Knowledge
  - Good Judgment
- Each Finding is an Essential Step in the Mishap Sequence

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Findings (2 of 7)

- Each Finding Is A Single Event Or Condition Leading To The Mishap
- List Findings In Time Sequence, First to Last
  - When it Occurred, not When Discovered:
  - Design/T.O.s/Regulations/Training/Mishap
- There Must Be Logical Connection In Sequence; If Not, A Finding May Be Missing
- The Last Finding Ends With All Damage/Injury

Findings (3 of 7)

Findings Should Have an ACTION, an ACTOR, and an OBJECT

i.e.: Who Did What to Whom (What)

Example...

Hydraulic Personnel Accomplished a Reseal of the LMLG IAW T.O. XXX but Failed to Service the Strut with Hydraulic Fluid.

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Findings (4 of 7)

Note: - Each Finding MUST Be Supported In Tab T

- Each Finding MUST Be Supported In Tab T

- Each Finding MUST Be Supported In Tab T

- ***If It Is Not, Either Add To Tab T Or Edit The Finding***

Findings (5 of 7)

- **<u>Do Not</u> Include Events Interesting To The Reader But Not Necessary To Sustain Sequence….**

  For example…….

  If pilot was not qualified to fly the mission, but an engine failure caused the mishap, do not list the pilot's lack of qualification as a finding

- **<u>Do Not</u> List All The Possible Alternatives That Could Have Existed Merely Because They Cannot Be Eliminated**

Findings (6 of 7)

- **Some Event Sequences Begin Long Before the Actual Mishap Sequence With Design Problems, Improperly Written Directives, or Inadequate Training Program:**
  - **“The F-XX Basic Aircraft Design Is Highly Conducive to Spatial Disorientation”.**
  - **“A Known Design Deficiency in the FXXX Engines Predisposes the Third Stage Fan Disk Lugs to Fractures Due to High Cycle Fatigue (HCF)”.**

Findings (7 of 7)

- **When Event Cannot Be Supported by Facts, Come Up With Reasonable Measure of Probability Based on Evidence, Professional Knowledge, and Judgment. For Example……**

Finding XX: The Mishap Pilot Failed to Recognize a Continuous Shallow Descent, Most Likely Due to a Combination of the Following Reasons:

- Channelized Attention

- Cognitive Task Oversaturation

- Incorrect Instrument-Crosscheck”

Causes (1 of 6)

- **Causes Are Those Findings That, Singularly or in Combination With Other Causes, Resulted in the Damage or Injury. According to 91-204 a Cause is…….**

A Deficiency, the Correction, Elimination, or Avoidance of would likely have prevented or mitigated the mishap damage or significant injury.

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Factor vs Cause

- **Factors:** Factors explain why causes, such as pilot error, supervision or equipment failure occurred. Most mishaps involve multiple mishap factors!

- May be either causal or non-causal:

  WX conditions which resulted in a rushed preflight which failed to uncover an unlatched cowling ("Weather was a factor in the mishap") Non-causal

Causes (2 of 6)

- **What a Cause isn't……**
  - **Purpose of SIB is to recommend preventative action, not to determine punitive or administrative action**
    - **I.E. reason for the mishap NOT who was responsible for it**
  - **Cause(s) tells us WHY a mishap occurred, not who is to blame….**

Cause does not equal blame!

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Causes (3 of 6)

- **Not Every Finding in a Properly Developed Sequence Is Causal, but ALL Causes are Findings**
- **Findings Which Sustained the Mishap Sequence, but Were Normal to the Situation (i.e. Expected Result), Are Not Causal. For example…..**

An Engine Failure Precipitated by a Fuel Boost Pump Failure is an Expected Result and not Causal

Causes (4 of 6)

- **Apply the Reasonable Person Concept When Determining a Cause……**
  - **If Performance or Judgment Was Reasonable Considering the Circumstances, Do Not Assign Cause……**

If personal action was "reasonable" based on training received, that action can not be causal, although deficient training might be.

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Causes (5 of 6) Problem Areas

- **Do not list a party as causal for not taking action unless they reasonably should have been expected to take such action, but did not.**
- **Publications should almost never be found causal…the party responsible for ensuring the publications are correct is causal unless the party took all reasonably expected actions.**
- **Weather as a cause……**

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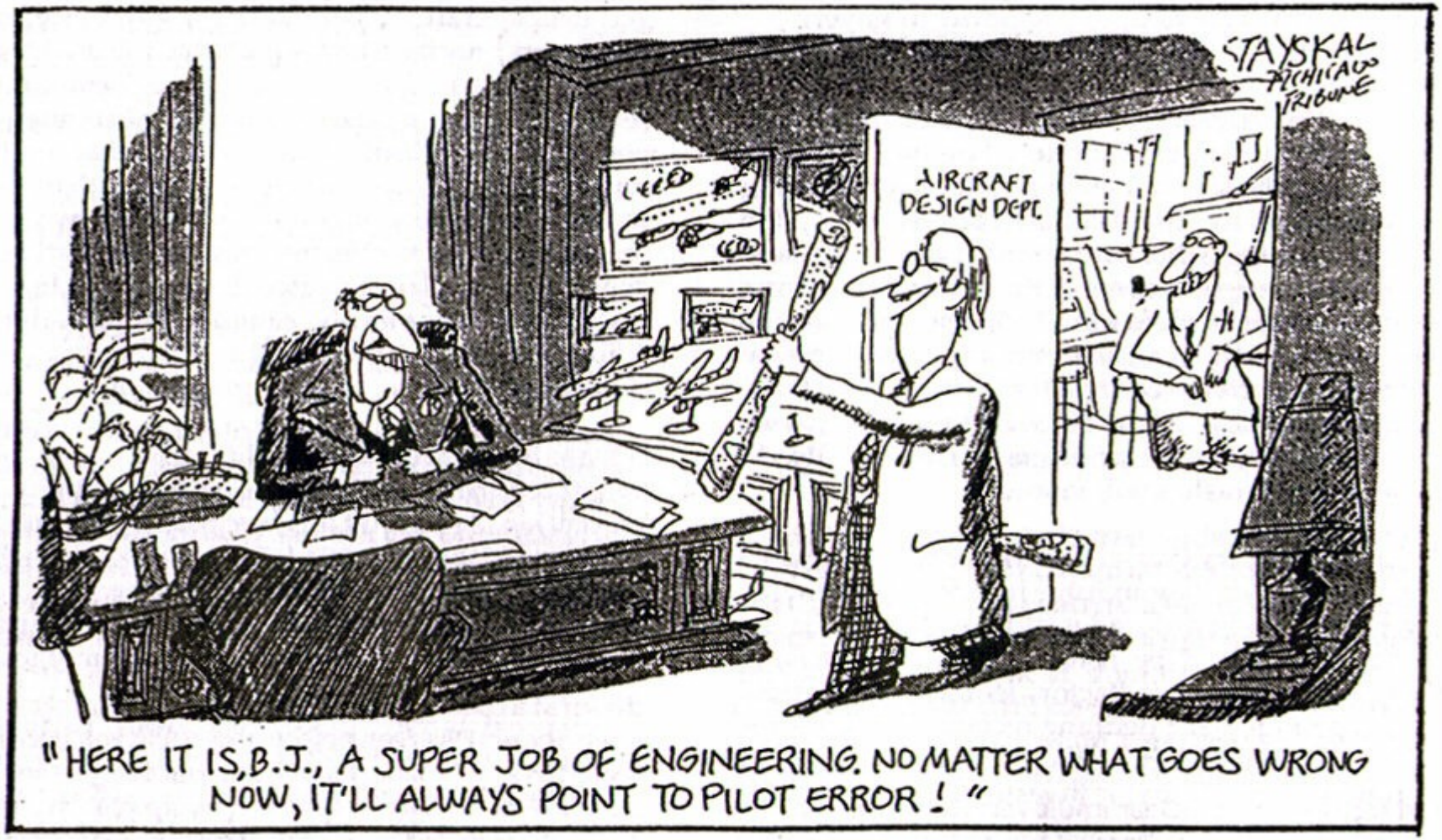
Causes (6 of 6)
Problem Areas


STAYSKAL
CHICAGO TRIBUNE
AIRCRAFT DESIGN DEPT.
"HERE IT IS, B.J., A SUPER JOB OF ENGINEERING. NO MATTER WHAT GOES WRONG NOW, IT'LL ALWAYS POINT TO PILOT ERROR!"

Findings/Cause Example

- **Finding 1: CAUSE. T.O. 1F-XXX-1 fails to discuss the characteristics/ recognition of and procedures for a locked main landing gear wheel brake at or shortly after landing.**

- **Finding 2: CAUSE. The contractor failed to maintain XXXXX air compressor dew point indicators IAW T.O. XXXX allowing air with higher than allowable levels of moisture to enter F-XXX high pressure pneumatic systems undetected.**

Findings/Cause Example

- **Finding 3: CAUSE. The contractor failed to purge the mishap aircraft high pressure pneumatic system IAW T.O. 1F-XXXX-6 allowing moisture accumulation in the aft drag brace.**

- **Finding 4: CAUSE. For an undetermined reason the mishap aircraft right brake relay valve developed an internal air leak allowing the loss of high pressure pneumatic air through the brake vent port.**

Findings/Cause Example

- **Finding 5: During flight, due to moisture freezing in the right brake relay valve, the mishap aircraft right main landing gear wheel brake self-actuated to the on position unbeknownst to the mishap pilot.**

- **Finding 6: At touchdown, the locked right main landing gear wheel brake resulted in right main gear tire failure.**

- **Finding 7: The mishap pilot was unable to keep the mishap aircraft from departing the prepared surface due to deficiencies in T.O. 1F-XXX-1**

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Findings/Cause ~~Example~~

- **Finding 8: CAUSE. The mishap aircraft right main landing gear struck a concrete runway lighting box, shearing the right main landing gear from the mishap aircraft.**

- **Finding 9: The mishap pilot egressed the mishap aircraft with minor injuries**

Recommendations (1 of 7)

- Feasible Actions which are intended to prevent recurrence of a similar mishap
- Recommendation says something was wrong that must be corrected
  - Normally in Response to Causal Findings
  - Every Cause Need Not Have a Recommendation
- All mishap investigations should include recommendations to prevent future mishaps

Recommendations (2 of 7)

- Recommendations should require the action agency to correct a deficiency rather than to implement at particular solution….
  - POOR: Move the right engine fire push-button to the right side of the cockpit
  - BETTER: Implement changes to the engine fire push-buttons to help preclude engine shutdown errors

Recommendations (3 of 7)

- **Do Not Write Recommendations That Only Require a Study or Evaluation…..Evaluations are Implicit in the Process**
  - **POOR: Evaluate changes to the anti-lock system**
  - **BETTER: Implement changes to the anti-lock system to prevent loss of feedback**

Recommendations (4 of 7)

- **DO NOT Make Sweeping/General Recommendations That Cannot Be Closed by Action Agency (i.e. “maintain”)**
- **DO NOT recommend briefing personnel on the mishap…basic command responsibility and safety office function**
- **DO NOT write vague recommendations on the importance of doing one’s job. However…….Cautions or Warnings on adverse consequences of not doing one’s job may be appropriate.**

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Recommendations (5 of 7)

Examples:

- Mishap caused by inadequate T.O. guidance

Recommendation 1: Expand T.O. F-XXX-1, Section 3, to include a discussion of the characteristics/recognition of and procedures for a locked wheel brake on landing.

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Recommendations (6 of 7)

- Mishap caused by incomplete/inadequate training program

Recommendation 1: Develop and implement a recurring XXXX ground training program for all XXX pilots that addresses the XXXX safe and unsafe operating envelope

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Recommendations (7 of 7)

- **Ensure Correct OPR/Action Agency is Identified:**
  - **Some Actions Can Be Taken at Unit Level**
  - **Other Need Actions by MAJCOMs or Other Agencies**
    - **Typically At The "Two Digit" Level**
    - **Typically OPR is "Funding" Agency**
      - **e.g. ACC/LG vs. SA-ALC/LPF**
    - **Lead MAJCOM for MWS**
  - **Technique - Call to ensure correct OPR identified**

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Other Findings of ~~Significance~~

- OFS are findings that investigators believe could contribute to future mishaps and/or warrant command attention.
- Uncovered during the investigation but did not contribute to the mishap being investigated.
- Must be fully explained/supported in the narrative portion of the report.
- List as separate section following Recommendations portion of Message/Narrative

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Other Recommendations of Significance

- **SIBs May Make "Other Recommendations of Significance" Related to OFS Uncovered During Their Investigation That They Believe Will Prevent or Mitigate Future Mishaps**
- **Place in Subparagraph Following the Main Sequence's Recommendations in Message Reports and End of Tab T in Formal Reports**

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OFS & ORS Example

- **Other Finding of Significance 1: Existing batteries for PBX-75 Survival Radios are unreliable, subject to premature aging, and may fail in extreme hot or cold environments. Unreliable batteries put the MP in a survival situation with no means of voice communication.**

- **Other Recommendation of Significance 1: Expedite procurement of reliable batteries for the PBX-75.**

OPR: 311 HSW/YA, OCR: ACC/DOT

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Formal Report: Conclusion

- **Adequacy of content:**

  Did the SIB include sufficient data from the investigation and analyses to support the conclusions?

- **Findings:**

  Do they represent the conclusions of the SIB? Are they consistent with the analysis presented?

- **Causes:**

  Do findings identified as "cause" start or sustain the mishap sequence?

- **Recommendations:**

  Are they relevant to the mishap? Do they address identified deficiencies?

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Miscellaneous….

- **The Bottom Line……**

  <u>The SIB President</u> is the final point of release for all information from the board and as such <u>is the final decision point for all findings, causes and recommendations</u>

Miscellaneous….

- **Minority Opinions…….**

  Primary members that disagree with the results may submit individual minority reports. Minority reports must include the reasons for disagreeing and will include findings, causes and recommendations if different from those contained in the report.

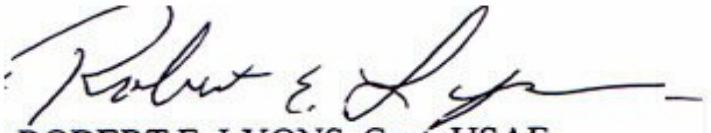
Miscellaneous…..

IX. AUTHENTICATION LETTER:

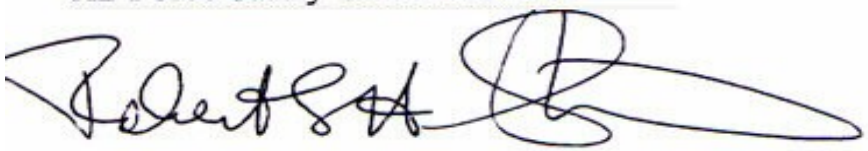
ROBERT A. SAUNDERS, Col, USAF
President, Safety Investigation Board

STEFAN E. ALEKSEVITCH, Capt, USAF
Investigating Officer

JEFFREY C. THOMAS, Major, USAF
Air Force Safety Center Advisor



ROBERT E. LYONS, Capt, USAF
Pilot Member



ROBERT S.H. SHAW, Major, USAF
Maintenance Member

STEVEN L. CLARK, Capt, USAF, MC, FS
Medical Member

LARRY R. SCHOMAKER, GM-14, DAF
Air Traffic Control Representative

Miscellaneous…

- **Notifying Person(s) Found Causal…..**
  - **The SIB will send a copy of the causal letter to the mishap unit safety office and include a copy in Tab V of the report. Once MAJCOM/SE releases the final message unit COS will give the letter to the individual(s) and allow them to use the Final Message to make comments. Individual has 30 days to respond.**

MEMORANDUM FOR Individual's Rank and Name

FROM: (Name), SIB President

SUBJ: Opportunity to Submit Witness Statement

1. The SIB investigating the mishap involving (Aircraft Type and Tail Number), which occurred on (Date), named you in its safety investigation report.

2. A copy of the final message report is available for your review at (Location). You cannot remove the message from that office nor reproduce any portion of it. The message is for official use only, and information contained therein is privileged, not releasable in whole or in part to persons or agencies outside the US Air Force without the express approval of the disclosure authorities specified in AFI 91-204.

3. You are required to indorse the original of this memorandum indicating receipt and your intention to either decline commenting on the findings or provide a Witness Statement. If you provide a Witness Statement, it is privileged and becomes part of the safety investigation report. It shall be used solely to determine all factors relating to the mishap and, in the interest of mishap prevention, to preclude recurrence.

4. If you decide to provide a Witness Statement, deliver one signed, reproducible copy to (Location), not later than (Date).

SIB President Signature Block

1st Ind, (Convening Authority)

Receipt acknowledged.

Intention:

a._____I decline commenting on the safety investigation report findings.

b._____I will submit a statement commenting on the safety investigation report findings and furnish it as instructed not later than _____.

Signature Block of Witness

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Turnover to AIB……

- **Wing CC “courtesy outbrief”**
- **Turnover to the AIB….**
  - **All non-privileged/factual data to include….**
  - **Wreckage, Part One of the report/original documentation, Parts Locations, Witness List, etc.**
  - **CVR tapes, ATC tapes, Air to Air Tapes, etc**
  - **Coroners reports, TOX testing, autopsy protocols, etc**

Note: For Space Mishaps, AIB & SIB formed at same time, non-privileged factual data provided to AIB ASAP

Turnover to AIB……

Example Turnover Letter

MEMORANDUM FOR PRESIDENT, AFI 51-503 ACCIDENT BOARD

FROM: Safety Investigation Board

SUBJECT: Inventory and Witness List, Class A Mishap, 2 x F-15A, 76-0117 & 77-0118, 19 Aug 99

1. The following items are released to the AFI 51-503 Accident Investigation Board:

a. Part I of the Formal Safety Report of subject mishap

b. List of witnesses (Atch 1).

c. Aircraft wreckage (Atch 2).

d. Medical and dental records.

e. Engine and aircraft records.

f. All negatives of releasable photographs.

g. Aircrew records.

h. Life support records.

2. Please reply by indorsement below that you are in receipt of these items and take responsibility for their final disposition.

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Turnover to AIB……

- **Weak Areas……**
  - **Incomplete Witness List**
  - **Video Simulations are <u>Privileged</u> if they are made with the involvement of SIB personnel**
  - **72 Hour/14 Day History is <u>Privileged</u>**
- **What if the AIB not present when ready to release SIB?**

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Going Home…..

(IF YOU STILL HAVE ONE)

- **Send White Elephants To MAJCOM/SE To Mail After The Briefing**
- **The Formal Report or Final Message Will NOT Be Distributed Prior To Briefing The Convening Authority**
- **Don’t Let Anyone Leave Until Message Is Complete**

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About the Message….

- **Usually last “major” item accomplished by SIB**
  - **“Cut-down” version of Tab T**
  - **Takes at least a full day to accomplish……**

    …..then usually too burned out to QC !
- **Needs to be as “complete” as possible**
  - **Only info “Causal” individuals see**
  - **FSOs brief from the message**
- **Job Not Complete Until You Give The MAJCOM/SE Your Final Message To Transmit After the Briefing….**

SIBs DON’T SEND OUT THE MESSAGE!!!

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What if…..

- **Despite your best efforts can't finish in 30 days…..**
  - **Remember 91-204 said "Should"**
  - **Some mishaps just won't "fit"**
    - **Difficult wreckage recovery**
    - **Analysis slow from contractor**
    - **Etc, etc…..**
- **91-204 says "SIB should place a greater priority on a complete and accurate report rather than trying to finish in the 30 day timeline"**
- **Convening Authority requests a waiver from AFSC**

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Briefing ROE

- Once the SIB completes the investigation and finalizes the hard copy report and final SIB message, the board members will brief the MAJCOM /CC
- Ask the MAJCOM/SE to send copies of format and previous briefings given to MAJCOM/CC
- ~~There will be no in~~termediate briefings prior to MAJCOM /CC briefing

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Briefing ROE

- **Corona South 00 change…….**
  - **With convening authority approval, the SIB results may be briefed to NAF/CC prior to briefing the convening authority**
  - **<u>For Informational Purposes Only</u>**
  - **<u>NAF/CC may not direct changes or direct further investigation</u>**

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Briefing ROE

- **Only personnel authorized to attend are the NAF/CC, except as noted……**
  - **For active duty mishaps: NAF/CC may invite active component Wing CC to briefing as observer**
  - **For AFRC mishaps: NAF/CC may invite Wing CC and AFRC NAF/CC to the briefing**

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Briefing ROE

- **In the case of an ANG mishap…..**

The NAF/CC may invite the Director of the ANG and the mishap unit's state Adjutant General. Upon invitation, the Director, ANG and the state Adjutant General will determine whether they or their respective designated representative attends the briefing…..All attendees will be fully briefed on the privileged nature of the briefing and that the briefed information will not be disclosed outside AF safety channels.

ANY OTHER BRIFINGS ARE PROHIBITED!!

Briefing

- From the Board President's perspective, one of the most difficult and challenging aspects is communicating conclusions to convening authority
- Rightly or wrongly, outbrief tends to be SIB's "Report Card"….. a lot rides on "Briefsmanship"
- Frustrating Process as Findings, Causes, Change as SIB Progresses
- Most Senior Officers Will Get Their Initial Information From the 30 to 45 Minute Briefing Delivered by the President

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Briefing

- **Technique: The briefing should start being written on the second day the BP is on scene…but not to the exclusion of other activities!**
- **A Number Of The Slides Are Canned And May Be Prepared Early In The Process**
  - **Some "Facts" aren't going to change…..**

    -- Mishap Date, Time, Tail Number, Unit, etc.

Script the Briefing!!!!!

Briefing

- **“Typical” Briefing layout…….**
  - **Title – MAJCOM, Class, Date, Location, etc**
  - **Listing of SIB Members, Tech Support Personnel, etc.**
  - **Mishap Data – Unit, Type A/C, Tail #, Call Sign, Date, etc.**
  - **Mishap Sequence/Overview – What was the sortie objective, when in sequence did mishap occur, etc.**
  - **Bottom Line Cause**
  - **MP(s) Biography, Flying History, 30/60/90 (14 Hour/72 Day)**

Briefing

- **“Typical” Briefing layout…….**
  - **History of the Mishap Aircraft – Tail #, Total Hours, Recent and Outstanding Maintenance, etc.**
  - **Detailed Sequence of Events (Animation)**
  - **Areas Considered/Not Found a Factor**
  - **Factors in the mishap**
  - **Findings/Causes**
  - **Actions taken to date**
  - **Recommendations**
  - **Other Findings/Recommendations of Significance**

Briefing

- **Keep The Briefing As Short As Possible**
  - **Explain The Sequence, Findings, Causes, And Rec's**
  - **Max Use Of Backup Slides For Answering Questions Or**
  - **Providing Additional Support For Conclusions**

- **Practice, Practice, Practice**
  - **Be Sure to Accomplish Numerous "Dry Runs"**

  -- Don't Leave SIB without "Dry Running" Several Times
  - **Feedback and field questions**

- **Who do you want to attend the Briefing?**

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Briefing

- Check MAJCOM For Hardware Limitations & Style
- Get To The MAJCOM Minimum Of 2 Days Prior
- Practice The Briefing In The MAJCOM Briefing Room
- If There Are Minority Opinions, Brief Them
- HQ USAF/SE will be the focal point for all briefings to the CSAF for aviation mishaps involving fatalities or other mishaps when requested

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After the Briefing.... Then What?

- **Once briefed, the convening authority has 3 options...**
  - **Accept the report as written**
  - **Accept the report with comment (i.e. addendum attached to hard copy and final message)**
  - **Direct the SIB conduct additional investigations.**
- **Upon completion of SIB brief, MAJCOM CC has ten (10) working days to provide comments (addendum)**

Addendum

SIB Final Message

Final Message

- Addressees
- Mishap Narrative, Analysis, Conclusions, etc
- Findings & Causes
- Recommendations
- Other Findings & Recommendations of Significance
- **MAJCOM Addendum**

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Addendum Example

- **Example of MAJCOM Addendum to SIB Finding:**
- **FINDING 12 (CAUSE): MP FAILED OR WAS UNABLE TO RECOVER THE MA, MOST LIKELY FOR ONE OR BOTH OF THE FOLLOWING REASONS:**

  - SPATIAL DISORIENTATION (OPERATIONS, PERSON-SQUADRON/DO, PERCEPTION)

  - LACK OF CONFIDENCE IN THE INSTRUMENT PRESENTATION (OPERATIONS, PERSON-SQUADRON/DO, JUDGEMENT)

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CAR Defined…..

Car = Causal-Agent-Area-Reason

(Causal Agent, Org Level/ Functional Area, Causal Finding A

(Person, Sqd/Flt, DO, Operations, Proficienc

See 91-204, Attachment 4!!!

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Addendum Example

ACC POSITION: NONCONCUR. RESTATE.

RESTATED FINDING:

MP FAILED OR WAS UNABLE TO RECOVER THE MA, MOST LIKELY DUE TO SPATIAL DISORIENTATION. (OPERATIONS, PERSON-SQUADRON/DO, PERCEPTION)

Addendum Example

RATIONALE:

THE RESTATED FINDING DELETES THE SECOND BULLET WHICH INFERS THAT THE PILOT HAD A LACK OF CONFIDENCE IN THE INSTRUMENT PRESENTATION CAUSING HIM TO BE UNABLE TO RECOVER THE MA. THE REPORT DOESN'T SUPPORT THE CONCLUSION THAT THE PILOT EVEN ATTEMPTED TO RECOVER THE MA; THEREFORE, THIS IS NOT APPROPRIATE AS A CAUSAL FINDING.

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After the Briefing.... Then What?

- **Once report received by AFSC, message sent using same AIG as SIB final report requesting comments on the report with a 30 day suspense**
  - **Commands/agencies with responsibilities for corrective actions will use SIB AIG to inform all of their comments**
- **All comments/endorsements received will be used in developing the Memorandum of Final Evaluation (MOFE)**

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After the Briefing.... Then What?

- **Memorandum of Final Evaluation (MOFE)**
  - **Assessment by AFSC of the SIB formal report...**
    - **Considers inputs from convening MAJCOM, action agencies, commander of mishap wing, person(s) cited in mishap report, etc.**
- **When HQ USAF/SE transmits the MOFE, it becomes the final official Air Force position on the findings, causes and recommendations**

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After the Briefing.... Then What?

- **Memorandum of Final Evaluation (MOFE) (cont...)**
  - **The recommendations validated by HQ USAF/SE become directed actions.**
  - **They are assigned to action agencies/given suspense dates**
  - **MAJCOMS establish Mishap Review Panels to ensure recommendations are addressed**
  - **HQ AFSC tracks each open recommendation until final action is complete**

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Timeline Review…

Day 0	Mishap, Interim Safety Board Actions
+3	SIB Arrival
+15	15 Day Message
+30	Finish SIB (Message,etc), Turnover to AIB
+40-50	Brief MAJCOM
+50-60	Message Released by MAJCOM with Adde
+90	MOFE Inputs To AFSC
+150	MOFE Released by AFSC….Investigation C

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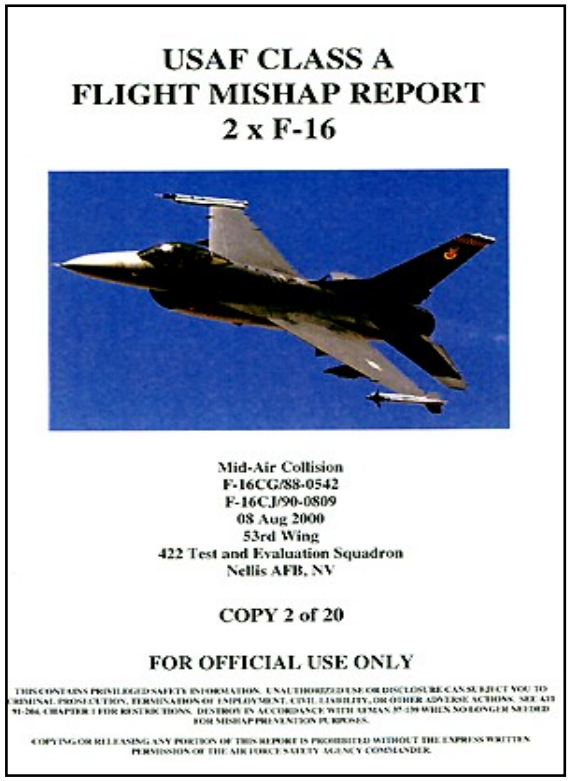
Review….SIB Products



USAF CLASS A
FLIGHT MISHAP REPORT
2 x F-16

Mid-Air Collision
F-16CG/88-0542
F-16CJ/90-0809
08 Aug 2000
53rd Wing
422 Test and Evaluation Squadron
Nellis AFB, NV

COPY 2 of 20

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FROM:
HQ ACC LANGLEY AFB VA//SIB//

TO:
CSAF WASHINGTON DC//CC//
SAF WASHINGTON DC//MIQ //
HQ USAF KIRTLAND AFB NM//SE/SEF//
HQ USAF WASHINGTON DC//XO/SEI//
HQ AFSOC HURLBURT FLD FL//SE//
HQ AETC RANDOLPH AFB TX//SE//
HQ ACC LANGLEY AFB VA//SE/SGM//
HQ AFMC WRIGHT PATTERSON AFB OH//SE/DR//
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ASC WRIGHT PATTERSON AFB OH//SE/ENVS//
311HSW BROOKS AFB TX//YA/YACE//
344 TRS LACKLAND AFB TX//TTEB//
HQ AFMOA BOLLING AFB DC//SGO//
HQ AFOTEC KIRTLAND AFB NM//SE//
OO-ALC HILL AFB UT//LIWS/SE//
AFRL WRIGHT PATTERSON AFB OH//HEPA//
AAC EGLIN AFB FL//WM//
COMMNAVSAFECEN NORFOLK VA//10/11/13/14//
HQ AWFC NELLIS AFB NV//SE//
53 WG EGLIN AFB FL//SE//
AIG 9391
AIG 9399
AIG 7348
AIG 8082

UNCLAS

SUBJECT: F-16, CLASS A, AIRCRAFT, FLIGHT MISHAP, MID-AIR COLLISION, FINAL STATUS REPORT, 20000808FTFA125A

Formal Report **Briefing** **Mess**

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In Closing…. Lessons Learned

- Remember you work for the MAJCOM CC and this is your full-time job
- Save ALL evidence for AIB
- Handcarry important evidence
- Tab T/Findings will take longer than you think
- Think “outside the box”
- Password protect Privileged e-mail
- Some SIBs won’t fit in 30 Day window
- Keep the “humor light” on

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The End.....